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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,545	09/15/2003	Michel Poulenard	4717-11100	2568
28765	7590	08/25/2006	EXAMINER	
WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006				PATEL, RITA RAMESH
			ART UNIT	PAPER NUMBER
			1746	

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,545	POULENARD, MICHEL	
	Examiner Rita R. Patel	Art Unit 1746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 15 September 2003.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-28 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 15 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/15/03; 1/27/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgement has been made of applicant's claim for priority under 35 U.S.C. 119. This application claims priority of foreign application FR 0308392 filed July 9, 2003.

Drawings

The drawings received 9/15/03 are acceptable for examination purposes.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The term "detection" in claim 26 is a relative term which renders the claim indefinite. The term "detection" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant states in claim 26, "the support element...further comprising at least one detection rod fastened between the plates"; albeit applicant provides a structural relationship of such a rod with relation to the plates, the term detection is not defined by the claim, nor in the specification. In the specification said term is made reference to on page 7, lines 20-22 and page 9, lines 3; however, the means for detection are not presented.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-12, 15-22, and 27 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamure (US Patent No. 6,576,065).

Lamure teaches a wafer treating apparatus with a tank adapted to contain a treatment bath therein and provided with a wafer support device adapted to receive at least one wafer of a first size; a grasping element for grasping and placing each first size wafer in the tank and withdrawing said first size wafer therefrom; and a second support adapted to receive at least one wafer of a second size; said second support having a geometry such that it can be grasped directly by the grasping element and received by the wafer support device of the tank (col. 6, lines 50-62). Lamure discloses holding members 11 which comprise of a pair of holding plates 12 and retaining members 14 which consist of bars 15; the holding members 11 must have bearing areas 48 such that the support 10 can rest on the wafer supports 22 (Figures 3a and 3b; col. 4, lines 27-28; 44-45). The bars 15 are rigidly joined to the holding plate 12; thus reading on applicant's claim for at least one rotation-blocking element for preventing the support adapted from rotating relative to the wafer-holding device when the support adapted is

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positioned in the wafer-holding device. As seen in Figure 6 of Lamure, the support holding plates 12 are substantially shaped U-shaped, as well as, a circular shape that corresponds substantially to the contour of a wafer of a first size. Bars 15, as illustrated in Figure 5, extend through plate 12 and read on applicant's claim limitation for a protruding element that cooperates with a limit stop of the wafer-holding device. The apertures formed in plate 12 for holding bars 15 therein form a shoulder limit stop, hence reading on applicant's claim. In Figure 7, Lamure depicts a V-shaped profile formed by bars 15. Also, Lamure's invention discloses each plate 12 of a certain thickness, as diagrammatically shown, which enables the plate to be held inside the wafer-holding device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-14, 23-25, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamure as applied to the claims above.

Lamure teaches a V-shaped profile that forms a single angle by bars 15, in Figure 7; however, Lamure fails to specify the exact degree of the angle created by said bars. It would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize said angle/slot locations to hold the substrate effectively

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since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Optimization of such an angle formed by said bars would create the best holding angle to accommodate various sized wafers therein.

Re claim 25, Lamure states that as a general rule, the support 10 must be compatible with the physical and/or chemical treatments mentioned above and must not contaminate the wafers 1. The support 10 is advantageously made from a very pure and chemically inert material such as quartz or various plastics material and fluorinated products (col. 4, lines 18-23). In particular, Lamure's teaching of plastics material and fluorinated product composition for the support reads on applicant's claims for making the support elements from a polyvinylidene fluoride material. It would have been obvious to one of ordinary skill in the art at the time of the invention to create the support elements of Lamure with polyvinylidene fluoride because it is a chemically inert material, and thus would not chemically interfere with any processing occurring within the apparatus; semiconductor processing is a chemically sensitive practice, so it would be advantageous to perform such processing within an apparatus that will not leach chemicals thereunto and thus create undesired chemical reactions.

Re claim 28, applicant claims "the support element...wherein the reduced thickness edge has a beveled profile", however, choice in aesthetic designs was held to have been obvious. *In re Seid* 73 ISPA 431 (CCPA 1947). Thus, Lamure's invention provides a sufficient basis for providing such an obvious design choice, and thus reads

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on applicant's claim because Lamure teaches the plates 12 to be of a thinness that supports its capability of being held within the wafer-holding device.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimizu et al. (US Patent No. 6,171,437) teaches a semiconductor device wherein an etching holder 10 includes a ring-shaped substrate holding member 11 having an opening portion at a center thereof, a ring-shaped substrate holding member 12 having an opening portion expanding step by step toward on main surface, and screws 15 fixing mutually each of the substrate holding members 11 and 12 through an O-ring.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RRP



MICHAEL BARR
SUPERVISORY PATENT EXAMINER